UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,075	02/26/2002	Richard Dean Dettinger	ROC920020044US1	4713

7590 11/26/2004	EXAMINER
IBM Corporation	LIANG, GWEN
Intellectual Property Law	

ART UNIT	PAPER NUMBER
2162	

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DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/083,075	DETTINGER ET AL.
		Examiner	Art Unit
		GWEN LIANG	2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-26_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-26_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a) ☐ All b) ☐ Some * c) ☐ None of:

  1. ☐ Certified copies of the priority documents have been received.

  2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
  application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _20041118_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 7-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding independent claims 1 and 7, the claimed method consists solely of the manipulation of an abstract idea. A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459. The claim is devoid of any limitation to a practical application in the technological arts, and hence non-statutory.

For such subject matter to be statutory, the claimed method must be limited to a practical application of the abstract idea in the technological arts. A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. See AT &T, 172 F.3d at 1358, 50 USPQ2d at 1452.

The examiner suggests that the claimed "method" be amended to read "computerized method".

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by

Kingberg et al. "Kingberg", (U.S. Patent No. 5,734,887).

With respect to claim 1, Kingberg discloses a method ...comprising:

providing, for a requesting entity, a query specification comprising a plurality of

logical fields for defining an abstract query (See for example: Abstract, "The

Applications then use a Logical Data Access Interface to access each of the required

physical relational database tables via the Logical Data Access Layer. Applications

then use logical entity type and logical entity type attribute names as specified in the

Logical Data Model in making Logical Data Requests to the Logical Data Access

Layer."; col. 3 lines 61-67, "The computer system having a logical data access module

for receiving a logical database request from a requesting application via the requesting

application[s]'s logical data interface..."; Figures 9 and 10); and

providing mapping rules which map the plurality of logical fields to physical

entities of the data (See for example: Abstract, "The Logical Data Access Layer

provides a rich set of functions for allowing an Application to control and manage a

database, build and execute database queries and interface with physical database.

The Logical Data Access Layer determines which of the physical tables and associated

columns are required to satisfy the Application request and then builds one or more

database query statements containing the appropriate physical table and column

names."; col. 3 line 41-67, "The computer system having a relational database

management system containing a plurality of physical tables, said physical tables

derived from said logical data model, each of said physical tables having a plurality of

columns, the database also having a logical to physical data mapping table for mapping

each logical entity type and logical attribute pair to a physical table name and a physical

column name as stored in the relational database management system and a join table

having a join entry for each logical entity type represented by more than one physical

table in the relational database management system, each join entry identifying the

physical tables to join, the physical columns to join, and the join criteria necessary to

form the logical entity type represented by the join entry. The computer system having

a logical data access module for receiving a logical database request from a requesting

application via the requesting application[s]'s logical data interface, forming one or more

database queries having physical table and physical column names using said logical to

physical data mapping table and said join criteria table."; Figures 3, 8, 9)

Claim 2 is rejected for the reasons set forth hereinabove for claim 1 and

furthermore Kingberg discloses a method wherein the abstract query comprises at least

one selection criterion and a result specification (See for example: Abstract, "The

Logical Data Access Layer determines which of the physical tables and associated

columns are required to satisfy the Application request and then builds one or more

database query statements containing the appropriate physical table and column names.".).

Claim 3 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Kingberg discloses a method comprising:

issuing the abstract query by the requesting entity according to the query specification (see for example: Abstract, "The Applications then use a Logical Data Access Interface to access each of the required physical relational database tables via the Logical Data Access Layer. Applications then use logical entity type and logical entity type attribute names as specified in the Logical Data Model in making Logical Data Requests to the Logical Data Access Layer."); and

transforming the abstract query into a query consistent with the particular physical data representation (See for example: Abstract, "The Logical Data Access Layer provides a rich set of functions for allowing an Application to control and manage a database, build and execute database queries and interface with physical database. The Logical Data Access Layer determines which of the physical tables and associated columns are required to satisfy the Application request and then builds one or more database query statements containing the appropriate physical table and column names.").

Claim 4 is rejected for the reasons set forth hereinabove for claim 3 and furthermore Kingberg discloses a method where the query consistent with the particular physical data representation is one of a SQL query and an XML query (See for example: col. 5 lines 1-5).

Claim 5 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Kingberg discloses a method wherein the mapping rules comprise an access method for each of the plurality of logical fields (See for example: col. 5 lines 59-62).

Claim 6 is rejected for the reasons set forth hereinabove for claim 5 and furthermore Kingberg discloses a method wherein the access method describes a location of the physical entities of the data (See for example: col. 8 lines 8-19; col. 27 lines 57-64).

Claim 7 is rejected on grounds corresponding to the reasons given above for claims 1 and 3.

Claims 8-10 are rejected on grounds corresponding to the reasons given above for claims 2, 5, 6.

Claims 11-16 are rejected on grounds corresponding to the reasons given above for claims 1-6.

Claims 17-20 are rejected on grounds corresponding to the reasons given above for claims 1, 2, 5, 6.

Claim 21 is rejected on grounds corresponding to the reasons given above for claim 7, and furthermore Kingberg discloses a computer comprising a processor adapted to execute contents of the memory (See for example: Fig. 9 and Fig. 10).

Claim 22 is rejected for the reasons set forth hereinabove for claim 21 and furthermore Kingberg discloses a computer comprising a storage device containing the data (See for example: col. 28 lines 51-57).

Claims 23-26 are rejected on grounds corresponding to the reasons given above
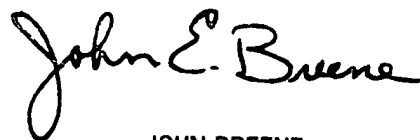
for claims 4, 2, 5, 6.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 571-272-4038. The examiner can normally be reached on 9:00 A.M. - 5:30 P.M. Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G.L.
18 November 2004

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